

**AMENDMENTS TO THE SPECIFICATION**

Please replace the paragraph beginning on page 10, line 26 and continuing to page 11, line 6 with the following amended paragraph:

Figures 1A and 1B are plan views and Figure 1C is a perspective view of a single unit or array of the conductimetric biosensor device 10 with an application membrane 11 and signal generation membrane 12 between electrodes 14A and 14B. Signal generation membrane 12 is coated on each side with the electrodes 14A and 14B made of copper and silver paste 14C and 14D, preferably 0.5 mm apart, wherein the gap 18 between electrodes 14A and 14B is the site for antibody immobilization of the analyte. The conductive polymer-labeled antibody membrane 17 is connected to the sample application membrane 11. Figure 1D is a cross-section along line 1D-1D of Figure 1A. Figure 1E is a cross-section along line 1E-1E of Figure 1A.